

# Structural Methods for User Experience (UX)

Programme course

6 credits

Strukturerade metoder för användarupplevelse (UX)

TNM100

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Computer Science  
and Media Technology

**Date determined**

2017-01-25

## Main field of study

Computer Science and Engineering, Media Technology and Engineering

## Course level

Second cycle

## Advancement level

A1X

## Course offered for

- Media Technology and Engineering, M Sc in Engineering

## Intended learning outcomes

The course aims to provide knowledge and skills in formal methods in human-computer interaction that are used to model, specify and analyse system properties. It also deepens the understanding of how tools and methods can be used during a development process to ensure that system properties related to the user experience are implemented and preserved.

After the course students will be able to:

- Apply formal methods and techniques to model, specify, analyse and design user experience (UX) related to use, context and design of a complex system.
- Follow and account for/explain typical processes in user-centered system design.
- Argue for the choice of methods, techniques and design solutions and present in oral and written presentations.
- Critically review the application of theories, methods and techniques in design of user experience and be able to identify and discern results that are scientifically sound.

## Course content

- User experience in software engineering
- Formal methods for human-computer interaction
- Interaction design of complex system
- Usability, user-centered design (UCD), user experience and design (UXD)

## Teaching and working methods

The course comprises of lectures, seminars, workshops/laborations and three hand-in assignments. There are two individual assignments and one group assignment/project work and they are all reported by a written report. The course runs the entire spring semester.

## Examination

UPG3	Group assignment	2 credits	U, 3, 4, 5
UPG2	Individual assignment	2 credits	U, 3, 4, 5
UPG1	Individual assignment	2 credits	U, 3, 4, 5

## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Course literature

Mattias Arvola (2014) "Interaktionsdesign och UX – om att skapa en god användarupplevelse".

ISBN 978-91-44-09764-0

## Department

Institutionen för teknik och naturvetenskap

## Director of Studies or equivalent

Camilla Forsell

## Examiner

Camilla Forsell

## Education components

Preliminary scheduled hours: 42 h

Recommended self-study hours: 118 h

## Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://stydokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).